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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/656,695	09/04/2003	William H. Hanewinkel III	907A.0146.U1(US)	8571

29683 7590 12/02/2004  
HARRINGTON & SMITH, LLP  
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SHELTON, CT 06484-6212

EXAMINER
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SWIATEK, ROBERT P

ART UNIT	PAPER NUMBER
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3643

DATE MAILED: 12/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.



## Office Action Summary

Application No.

10/656,695

Applicant(s)

HANEWINKEL ET AL. 

Examiner

Robert P. Swiatek

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2,3,6-10,17 and 26 is/are allowed.
- 6) ☒ Claim(s) 1,5,11,12,16,18-21,23,25 and 27 is/are rejected.
- 7) ☒ Claim(s) 4,13-15,22 and 24 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Fluegel (US 5,702,073: Ref. on page 2 of Information Disclosure Citation Form). The Fluegel patent discloses an aircraft component having a first section 20 attached to the exterior surface of the aircraft and a second section 14 in the form of a tube welded to and extending outwardly from first section 20, the two sections together comprising a one-piece structure. Section 14 is deemed to constitute a heat transfer surface. While first section 20 doesn't close an access opening, it is *adapted* to do so. For example, the right and left extremities of section 20 (as seen in Figure 3 of Fluegel) are configured such that they could receive bolts for attachment to the skin of an aircraft or, alternatively, they could be welded to an aircraft fuselage; there is nothing to physically prevent first section 20 from being situated outside an aircraft. The "adapted to be attached" clause of instant claim 1, line 2, connotes *intention* but not structure. With regard to claim 5, the tube "passes" of second section 14 of Fluegel when this section has "flattened sides" (see column 4, line 7, of Fluegel) are considered to be fins.

Claims 11, 12, 16, 18, 19, 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Houf et al. (US 4,769,557). The Houf et al. enclosure includes electronic circuitry 12 disposed

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within a power switching housing 14 atop a first wall member 64. A flange 68 with apertures extends from an outer periphery (considered to be a connection section) of the wall member 64; heat sink fins 66 project exteriorly from wall member 64. The electronic circuitry of Houf et al. is capable of being deployed within an aircraft; as to claims 18, 19, the housing 14 and wall member 64 are considered to possess at least minimal electromagnetic interference shielding properties. Housing 14 is considered to be part of heat sink 16 (which includes fins 66) due to its connection via bolts 55, while the modules 28 (see Figure 1 of Houf et al.) are deemed to constitute portions of an enclosure surrounding the circuitry 12. Flange 68 is of a size whereby it could be attached to the exterior of an aircraft.

Claims 20, 21, 23, 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Connolly et al. (US 5,184,141: Ref. on page 2 of Information Disclosure Citation Form). The Connolly et al. electronics assembly can be embedded within the leading edge 12 of a wing; it includes electronic components 50 as well as a contoured first side section 32 connected to the exterior of the airfoil. Inner skin/backplane member 44 of Connolly et al. is deemed to constitute a heat sink (see column 5, lines 28-32, of Connolly et al.). One of the electronic components 50 of Connolly et al. can be a RF processor module (page 5, line 7, of Connolly et al.); a printed circuit board is considered to be inherent in the construction of such a module. The first side section 32 closing the housing in which the components 50 are situated is deemed to constitute a wall of an enclosure for the components (in this case the section is spaced from the components).

Claims 4, 13-15, 22, 24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Applicants' arguments filed 9 September 2004 have been fully considered but they are not persuasive. Claims 1, 5, 11, 12, 16, 18-21, 23, 25, 27 are not believed allowable for the reasons set forth above.

Summary: Claims 1, 5, 11, 12, 16, 18-21, 23, 25, 27 have been rejected; claims 2, 3, 6-10, 17, 26 have been allowed; claims 4, 13-15, 22, 24 have been objected to.

RPS: 0703/308-2700  
24 November 2004

*Robert P. Swiatek*  
ROBERT P. SWIATEK  
PRIMARY EXAMINER  
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